Information Item

Educational Policy and Programs Committee

Academic Program Review

The California Postsecondary Education Commission is charged under State law with a number of responsibilities regarding academic planning, approval, and review, including the analysis of all proposals for new academic and occupational programs submitted by the University of California, the California State University, and the California Community Colleges.

In this information item, staff reviews the legislative language and summarizes the work done by the Commission in implementing its mandate. It describes Commission and segmental roles, delineates the criteria used in the program approval process, and provides selected examples and a matrix of community college programs reviewed over the last year, as well as the five-year academic plans of the University of California and the California State University. The item concludes by identifying issues for further consideration.

Presenter: Joan S. Sallee.



The California Postsecondary Education Commission's Role in Academic Program Planning, Approval, and Review

N ESTABLISHING the California Postsecondary Education Commission in 1974 as the State's planning and coordinating agency for postsecondary education, the Legislature and the governor recognized the review of academic programs as one of its central functions and charged the Commission with a number of specific responsibilities in this regard. This item reviews the Commission's historic role and responsibilities in academic program planning, approval, and review; provides selected examples of its work; and identifies issues for future consideration.

Context

At the heart of any university is what it teaches. Its academic programs are the fundamental reason that students come to an institution, and the reason that faculty, classrooms, laboratories, and the entire university infrastructure exist. Indeed, the curriculum is a major component in defining both the institution and the student. Academic programs structure intellectual coherence for students, providing knowledge useful to them and to the larger society to which they will eventually contribute. Academic programs prepare students for work or further study; broaden their intellectual and social horizons by challenging them with ideas and points of view; and in so doing, develop an informed, questioning citizenry without which democracy cannot survive. Academic programs are, indeed, the heart of the postsecondary enterprise.

California's public and independent colleges and universities offer a myriad of academic programs -- from Architecture at the California Polytechnic State University at San Luis Obispo; Asian American Studies at UCLA; and Advanced Transportation Technology in Alternative Fuels at Long Beach City College to Cognitive Science at the University of California, Santa Cruz; Creative Writing at San Francisco State; and Culinary Arts at Contra Costa College to Urban Planning at San Jose State University; Veterinary Medicine at UC Davis; and Woodworking at the College of the Redwoods. Some academic programs like Rhetoric have been part of higher education's history since the Middle Ages, while others, such a Biostatistics, Web Design, or Medical Informatics were not even imagined a decade ago. This broad range of programs illustrates that education not only protects and serves as the repository of the world's intellectual heritage but also responds to changing societal needs and, in the case

of research universities, creates new knowledge. To that end, academic programs in California's higher education institutions continue to evolve, and the California Postsecondary Education Commission has an important role to play in the process.

The Commission reviews the academic plans for new campuses and centers in the University of California, California State University, and California Community Colleges. In addition, campuses in all three public systems that propose to implement new academic programs first submit those plans to their respective systemwide offices that, in turn, transmit these proposals to the California Postsecondary Education Commission. Although the Commission does not itself critique existing programs, it examines the results of the program reviews that are done regularly by the University of California and the California State University. activities of academic program planning, approval, and review can be visualized as a continuum that begins with academic master planning for new campuses; moves into the development and eventual submission of proposals for new programs; and continues with the ongoing review of established programs to determine the resources needed to maintain their vitality or the process for their discontinuation. These elements are necessary and integral parts of a cyclical process undertaken with varying degrees of success by all colleges and universities. independent institutions, however, operate autonomously, and each makes its own decisions about the kind and content of its academic programs and on-going programmatic evaluation.

The Commission's legislative mandate

Among the Postsecondary Education Commission's mandates in the California Education Code, those related both directly and indirectly to program planning, approval, and review, may be found in Sections 66903 and 66904, unless otherwise noted below.

Academic planning process for new campuses and centers The Education Code states that the Commission shall advise the Legislature and the governor regarding the need for, and location of, new institutions and campuses of public higher education. Sites for these new institutions or branches cannot be authorized or acquired and will not receive State funds, unless recommended by the Commission. Education Code 89002 applies specifically to the California State University and specifies that construction of authorized campuses can begin only upon resolution of the State University Trustees and the approval of the Commission.

These quasi-regulatory responsibilities for the Commission have been formalized in a set of guidelines (Guidelines for Review of Proposed University Campuses, Community Colleges, and Educational and Joint-Use Centers, April 2002). Under these guidelines governing the Commission's responsibilities in approving new campuses and centers, the Commission is directed to consider the academic plan for that campus or center as part of the review. Most recently, staff has reviewed and made recommendations about the academic plans for the new campuses at the University of California, Merced; California State University, Channel

Islands; and West Hills College at Lemoore. Additionally, staff has reviewed the academic plan for the off-campus higher education center at Otay Mesa proposed by the Southwestern Community College District in collaboration with San Diego State University. Commission staff has also been involved in discussions with representatives from Canada Community College and San Francisco State University about a joint-use center on the Canada campus.

Approval process for new academic programs

The Commission is to review proposals by the public segments for new programs, taking into consideration the priorities that guide them and the degree of coordination with nearby public, independent and private post-secondary educational institutions, and to make recommendations regarding those proposals to the Legislature and the governor.

The University of California, the California State University, and the California Community Colleges are required to forward all proposals for new postsecondary educational programs to the Commission. In turn, the Commission is to review the proposals within a reasonable length of time, not to exceed 60 days following submission of the materials. Under this mandate, Commission staff, on behalf of the Executive Director and the Commission, reviews and either concurs or does not with the system's recommendation for approval on proposals for new schools and colleges, graduate and undergraduate degree and certificate programs, and new research institutes or centers. The Legislature and the governor are advised about these decisions through Commission reports and the State budget process.

While the Commission's authority is advisory on most matters, including program approval, Section 66010.4 of the Education Code gives the Commission specific approval authority, as opposed to merely making recommendations, for all doctoral programs proposed by the California State University in conjunction with one or more independent institutions. During the review of a proposal for such a joint doctoral program, Commission staff organizes a Joint Graduate Review Board of faculty from campuses of the State University and independent institutions, except those institutions actually proposing the program, to discuss the proposal and advise Commission staff. The need for such review boards in the review of proposals for joint doctoral degrees between the State University and the University of California is not necessary, because the internal review processes within the university systems are sufficiently rigorous that Commission staff can utilize their results in the course of its own review.

Process of review for existing academic programs The Education Code also directs the Commission, in consultation with the public segments, to establish a schedule for segmental review of selected educational programs; evaluate the program approval, review, and disestablishment processes of the segments; and report its findings and recommendations to the Legislature and the governor. Commission staff depends upon the well-established and regularized processes in the University of California and the California State University for the review

versity of California and the California State University for the review of established programs in the four-year systems. The procedures are less well articulated in the community colleges, a consequence of the less-centralized organizational structure of that segment of higher education.

Other tasks

The Commission is also to collect or conduct studies of projected manpower supply and demand on a periodic basis to improve the information base upon which students make choices about professions and to consider the relationship between academic education and vocational educational and job training programs.

While a lack of sufficient resources has precluded regular attention to this task, Commission staff has occasionally prepared supply-and-demand studies in such diverse occupational areas as education, nursing, and library/information science in response to proposed legislation or campus initiatives. A recent example is a study currently being undertaken in conjunction with the California Policy Research Center, California Program for Access to Care, and the University of California, San Francisco. This study will address various aspects of nursing education programs in the California Community Colleges and the public policy issues surrounding the State's nursing shortage (SB664).

These mandated activities, either directly or indirectly related to academic programs, are central to the Commission's role as the planning and coordinating agency for California postsecondary education. Through its role in academic planning, approval, and review, the Commission ensures that the systems of higher education remain responsive to the State's educational and economic needs, the needs of students, and the maintenance of high quality in all programs.

Commission and segmental roles

Unlike its counterparts in many other states, the Commission operates in an advisory capacity and hence has a comparably modest role in the oversight of academic programs. It has no authority, for example, to conduct its own reviews of existing programs on individual campuses nor to discontinue programs as do many state governing agencies. The Commission staff focuses its attention primarily on the proposals for new graduate programs submitted by the University of California, both undergraduate and graduate programs in the California State University, and associate degree and certificate programs in the California Community Colleges.

Processes in the University of California and the California State University An academic program in either of the public university systems is developed in essentially the same way. Frequently prompted by new developments in an intellectual field or by changing student or societal needs, faculty begin the process by proposing a new program to their department and to the appropriate deans. Once a formal proposal is developed, it must make its way through a variety of checkpoints on each campus.

Proposals for undergraduate programs in the University of California are reviewed and decided upon by the campuses themselves. Proposals for

graduate programs are submitted to the Office of the President in Oakland for review and a recommendation for approval before they are transmitted to the Commission. The California State University Chancellor's Office in Long Beach, on the other hand, reviews the proposals for both undergraduate and graduate programs in the State University and sends all proposals to the Commission for review and action. Both systems carry out a careful review of each proposal before its transmittal to the Commission. As part of its review, the State University engages external reviewers in similar or related disciplines from throughout the country, while the University of California relies upon the systemwide Academic Senate to provide additional expertise.

The Academic Senate committee most involved in academic program concerns at the University of California is the Coordinating Committee on Graduate Affairs (CCGA). With a membership of one faculty representative from each campus plus a chair and vice chair and two graduate student representatives, CCGA reviews and makes recommendations on all proposals for new graduate programs and organized research units (ORAs, ORUs, and MRAs) in the University of California system.

These extensive and sometimes time-consuming reviews include consultation with external referees, site visits, and consideration of systemwide issues. The review process may be attenuated if the campus is asked to reconsider certain elements and/or rewrite the proposal. The Coordinating Committee on Graduate Affairs and the Commission review proposals for new academic programs simultaneously. Given that each body focuses on different indices of quality, concurrence by the Commission is always made contingent upon approval by CCGA.

In 1993, the University of California created the Academic Planning Council (APC), a systemwide body to oversee long-range planning for the University, to replace the Academic Planning and Program Review Board. According to the University's website, "the APC's greatest value is raising questions, framing issues, and analyzing alternatives concerning the University's academic directions." The APC meets six to eight times a year and is chaired by the Provost and Senior Vice President for Academic Affairs in the Office of the President.

Examples of topics discussed by the Academic Planning Council in recent years include enrollment planning and efforts to accommodate increases in undergraduate enrollments; increasing graduate student enrollments; instructional technology; health sciences planning; and faculty recruitment. In October 2001, the APC discussed the advisability of systemwide planning for new professional schools versus a campusgenerated approach; the Commission recently raised this issue with the University and developments are being watched with interest.

The University of California and State University each provide a larger context for the review of new program proposals by preparing an annual list of new programs projected over the next five years. Although these lists, including projected dates of implementation, may change, they are a helpful guide to an institution's intent and system direction. The Commission is thus made aware of new programs on the horizon and how one campus may be similar to another. The current five-year plans from the University of California and the California State University can be found in Attachments A and B.

Processes in the California Community Colleges

Since its inception, the Commission reviewed all new academic and occupational programs proposed by the State's community colleges. In December of 1995, however, budget and fiscal constraints forced the Commission to suspend its review. Recognizing its statutory requirement and the public policy importance of reviewing all new programs proposed by public colleges and universities in California, the Commission during the 1999-2000 budget year requested additional resources to reinitiate its role in the reviewing proposed community college academic and occupational programs. The Department of Finance approved the Commission's request, and in January 2001 the Commission hired a senior policy analyst for the purpose of reviewing new community college programs.

Commission staff reinstated its process of review by holding several meetings with the staff of the California Community Colleges Chancellor's Office and discussing the role that Commission staff would play in the review process. Over a period of months, Commission staff refined the review process in consultation with Chancellor's Office staff. The timing of these consultations was fortuitous, in that the Chancellor's Office was involved in redesigning and reissuing its *Program and Course Approval Handbook*. The Commission's staff was afforded the opportunity to comment on the new *Handbook*, and the Commission's guidelines for academic and occupational program review are incorporated in the Chancellor's Office publication. As of May 2002, Commission staff has reviewed over 110 new academic and occupational program proposals since it reinstated its review process in January 2001 (Attachment C).

The Commission's guidelines

Once a proposal arrives at the Commission for review, staff applies seven criteria that have been developed in consultation with the systems and in existence for many years. These criteria, which represent the State's interests, include the following:

- Student demand
- Societal needs
- Appropriateness to institutional and segmental mission
- Number of existing and proposed programs in the field
- Total costs of the program

- Maintenance and improvement of quality
- Advancement of knowledge

The Commission's reviews take into consideration enrollments, capacity of other programs, geographic distribution, adequacy of resources, job opportunities, articulation with other segments, data from professional organizations, and other indices, as appropriate. Although staff depends upon the systemwide office and faculty review on matters related to appropriateness of the curriculum and number and qualifications of the faculty, it may also examine these elements as well. Each proposal involves several readings, consultations with the systems, research on the discipline, contact with professional organizations, a catalog search, analysis of enrollments and degrees conferred in existing programs in the discipline, before a letter concurring, not concurring, or requesting additional information is sent to the appropriate system office.

Specifically, *student demand* for a program is determined by a variety of measures: current enrollments in the same program that exists on other California campuses; current enrollments in related programs on the proposing campus; enrollments projected for the proposed program; surveys of students interest; and five year enrollment trends in enrollments and degrees conferred in existing programs in the discipline across systems, including independent institutions.

The criteria for *societal need* vary with the level of program. Staff requires data on labor market demand for new occupational programs in the community colleges, including information from the Employment Development Department, Workforce Investment Boards, and employer surveys. This information needs to reflect the demand for persons being trained for specific jobs, not for the industry as a whole, and must include anticipated salaries and wages expected for the specific jobs for which students are training. With programs leading to an associate degree or certificate, the local employment market tends to be more important than in the case of graduate programs in the University of California or the California State University where state and national manpower prospects assume more importance.

For what are considered "core" programs, like English, history, and other liberal arts disciplines, specific employment opportunities are not the primary consideration in the Commission's review. These are disciplines that contribute to a well-furnished mind for the individual and a civil and democratic society for the citizenry as a whole.

In recent months, many community colleges have initiated new transfer programs that encourage receipt of an Associate Degree prior to transfer. A degree completion demonstrates a viable product for both the student and the college, and is one measurement in the California Community Colleges' Partnership for Excellence (PFE) program.

The Commission has agreed that new academic transfer programs that are a repackaging of existing courses into a new program name do not require Commission concurrence, so long as no new resources are necessary to support the program. However, the Commission expects that such new program proposals include a complete discussion of programmatic articulation agreements with specific four-year colleges, and the extent to which the community college course offerings match four-year institution lower division requirements. Commission staff receives copies and conducts a cursory review of these new program titles.

Appropriateness to institutional and segmental mission refers to the delineation of function as set forth in the California Master Plan and the system's direction as approved by the segmental governing board. In evaluating the number of existing and proposed programs in the field, Commission staff looks across the segments to determine regional distribution and responsible use of public resources. Numbers alone do not indicate unnecessary duplication. Total costs may be the most difficult criterion to assess in most proposals, primarily because of lack of information about the actual costs of needed faculty, facilities, equipment, library acquisitions, etc. and the source of funding for such needs.

The Commission is interested in indications that high standards have been established for the implementation, sustained operation, and continual evaluation of the proposed program. Thus, *maintenance and improvement of quality* is an essential aspect of the Commission's review process. The *advancement of knowledge* is also an important criterion for programs in the four-year segments. The University of California and the California State University have the opportunity to advance cutting-edge ideas and techniques; these programs are occasionally the first in the State and sometimes the country.

While not explicitly included in the criteria for review, and therefore not a requirement for concurrence, Commission staff request information regarding the extent that occupational program courses in the community colleges might articulate with four-year university courses. The Commission also requests that colleges discuss whether an entire program is transferable, or whether only selected courses are articulated with a specific four-year program. The college is expected to identify and discuss specific programmatic articulation efforts with identified University of California and California State University campuses, including letters of support from those four-year institutions. The college is also expected to provide information regarding differing course requirements for transfer to the various four-year academic programs.

Application of Commission guidelines

These criteria were established over 20 years ago, in consultation with the segments, and are described in a document called *The Commission's Role in the Review of Degree and Certificate Programs*. To exemplify how these *Guidelines* work in practice, the following section will describe a representative selection of programs reviewed over the last year. Al-

though a vastly truncated version of the numbers of new program proposals received, the process of review, and the ultimate decisions made, this summary is designed to present illustrative examples of the programs reviewed and the variety of issues they embody. Through its review processes, the Commission assures that each new academic program proposed meets student demand, societal need, and high standards of quality, thus making efficient and effective use of the State's resources and contributing both to the individual and the common good.

School of Pharmacy, University of California, San Diego The Commission is mandated to review proposals for new schools and colleges. It is the establishment of these administrative structures that requires the most significant outlay of resources for a dean, founding faculty, and capital investments, often for both facilities and equipment. When the proposal for a School of Pharmacy was initially submitted to the Commission, staff concurred conditionally with it, contingent upon receiving additional information about costs and adequacy of resources to both establish and maintain it.

The supply and demand issue, however, prompted staff to view the proposal in a positive light from the outset. In December 1999, Congress funded a national study in response to what was referred to as "a national crisis" in attracting and producing pharmacists. States with far fewer citizens than California had at least one state-supported School of Pharmacy, often more, yet California, with its immense geographic reach and size of population, possessed only one such school -- at the University of California, San Francisco.

Making the supply and demand numbers even more stark was the fact that only 13% of those applying to UCSF were admitted to the class of 2000; 784 students were turned away. At the same time as this indication of student demand, the increase in California's population both in numbers and in age represents a burgeoning societal need for more pharmacists. According to the monthly survey that directly inventories the hiring of pharmacists nationally, the numbers already show a moderate to high demand that cannot be filled.

Clearly, the State needs another School of Pharmacy, and San Diego is the appropriate site for a number of reasons. The region has the third largest biotechnology industry in the country, and this growing industry has a regulatory need for pharmacists related to the testing and manufacture of drugs. Coupled with the fact that two-thirds of all pharmacists are employed in community drug stores, UCSD pharmacy graduates will have a number of employment opportunities available to them.

The campus already has an undergraduate pharmaceutical chemistry program; a pharmacology track in the Biomedical Sciences Ph.D. program; a pharmacy clerkship in cooperation with UCSF; and a pharmacy residency program at the UCSD hospitals. In addition, for over 20 years, UCSD has served as a clerkship training site for 18 UCSF Pharm.D. students in

their fourth year of training. And the San Diego Veterans Administration Health System, located on the UCSD campus, serves as a training site for pharmacy students from the University of the Pacific in Stockton.

With the receipt of additional information about resources from the UC Office of the President, the Commission formally concurred in May 2001 with this proposal for a new School of Pharmacy at UCSD and supported the University in its quest for funding during budget hearings.

Schools of Law, University of California, Riverside and Irvine

In June 2001, the Commission found no compelling need to establish a School of Law at either the University of California, Riverside or the University of California, Irvine. Staff concluded that neither sufficient student demand nor societal need existed to warrant the substantial cost of establishing and maintaining even one additional publicly supported law school in the State.

Commission staff agreed with the evidence in the study, *The Labor Market for Attorneys in the State of California*, prepared for the UC Office of the President by the Rand Corporation. It shows that the number of Barcertified attorneys will likely keep pace with or exceed the expected growth in demand between 2001 and 2015 for the state as a whole and for each region of the state as well. Coupled with the proposed capital costs of \$61.7 million, operating costs of \$15.7 million, and cumulative start-up costs of \$24.1 million for the Riverside School of Law alone, the supply and demand issue led the Commission to advise the UC Office of the President that concurrence would not be forthcoming.

At a time when State resources were leveling off, before their precipitous decline; the University had committed itself to a tenth campus and to a major off-campus center; and had implemented extensive strategies to meet increasing student demand at the undergraduate level, as well as expanding its graduate programs, the Commission urged the University to examine its priorities. An additional and substantial fiscal burden on the State was thus avoided.

Master of Advanced Studies (M.A.S.) in Clinical Research in the Department of Epidemiology and Biostatistics in the School of Medicine at the University of California, San Francisco

This new degree program -- the Master of Advanced Study (M.A.S.) -- was first announced by President Atkinson in 1998 as part of an initiative to serve specific groups of working professionals with well-defined needs for advanced degree work. Some of these degrees are meant for career advancement, while others may allow individuals to pursue new career directions or advanced liberal studies. Private universities like Chicago, Harvard, and Stanford have found such degrees in the liberal arts of great interest to working professionals.

The program is to be offered on a schedule and/or in a location that would increase access for working adults, i.e., on a part-time rather than full-time basis. The programs are expected to be primarily self-supporting, although State-funded options within a campus's graduate enrollment ceilings may also occur. Some programs might be offered in collabora-

tion with University Extension. The Office of the President invited campuses to develop pilot programs, and eight of the nine campuses received funding for programs such as Dietetics, Digital Media, and Criminology, Law and Society. The Commission concurred with this most recent M.A.S. degree program in April 2002, contingent upon CCGA approval.

Joint Doctorate in
Computational
Science between
San Diego State
University and
Claremont
Graduate
University

In March 2002, the Commission approved this joint Ph.D. program between a State University campus and an independent institution. Of all the CSU campuses, San Diego State has the greatest number of joint doctorates, due to faculty, administrative, and institutional commitment to the concept and to successful implementation of a wide range of joint doctoral degree programs.

After its own review, Commission staff constituted a Joint Graduate Review Board to review the proposal for this program. It included distinguished faculty from Stanford University, the California Institute of Technology, California State University at Long Beach, and Chico State University, as well as staff from the Association of Independent California Colleges and Universities and the State University Chancellor's Office. The proposal was unanimously endorsed, although the panel made a few suggestions for improvement. President Steadman Upham of Claremont thanked the Commission for its recommendations and agreed "to incorporate all of these useful ideas into both the administration and curriculum of the program as it is implemented." This doctorate will be the first doctoral program in Computational Science in the State of California.

B.S. degreee program in Graphic Communications at California State University, Los Angeles Staff has seen an increasing number of proposals, particularly in engineering and technology that seek to establish independent, freestanding degree programs from options that have operated under other programs. For example, a degree in Electrical Engineering better serves students and employers than a general Engineering degree with an option in Electrical Engineering.

California State University, Los Angeles decided to institute this separate degree program in Graphic Communications, after 45 years of offering an option in Printing Management under the B.S. degree in Industrial Technology. Its reasons had to do with accreditation, student recruitment, and rapid-fire changes in the industry.

The National Association of Industrial Technology (NAIT) will accredit only full degree programs, not options, which has stood in the way of the department seeking accreditation for its Industrial Technology degree. Furthermore, the Printing Management program was not very visible under the old configuration, and student recruitment and program growth had suffered as a result. Employers in digital print and media fields did not readily associate a degree in Industrial Technology as meeting their needs. In addition, with traditional print media rapidly converging with

digital media, Printing Management no longer accurately described either the educational preparation offered or the job opportunities available.

Commission staff believes that students and employers alike will be better served by the change in nomenclature and structure. The program development team included industry leaders as well as faculty, and the Engineering and Technology Building, which houses the Graphic Communications Lab, recently completed a \$32 million renovation. The program was developed in collaboration with community colleges in the area that offer two-year graphic communications/printing programs. The campus also has an articulation agreement with Manual Arts High School where at-risk students are identified for a Graphic Arts Academy and bused to the California State University, Los Angeles campus for graphic communications coursework that is transferable. Staff concurred with this Graphic Communications program, the only four-year program in the discipline in southern California.

Certificate and associate degree in network design and administration at DeAnza College

The Commission has received numerous Computer and Information Science occupational program proposals since January 2001. A proposal, noteworthy because of its exceptional content, was a Network Design and Administration program at DeAnza College.

The college provided information that demonstrated a strong labor market demand for data communication technicians, information system operators, network administrators, network technicians, PC support specialists, technical support specialists, and other user support specialists within the geographic vicinity of the campus. The program was not only warranted, but vital to the economic success of the region.

The college also provided an extensive job market analysis, along with an extensive discussion of student demand and interest in the program. In addition, the college presented evidence to show that it had develop extensive working relationships with a wide variety of employers throughout the Silicon Valley, and that its program was designed to effectively address the specific training needs of employers throughout the region. The Commission concurred with the proposal.

Associate degree (transfer) in mathematics at American River College

The Commission received several proposals since January 2001 for new academic transfer programs. As noted earlier, new program proposals that are comprised entirely of existing courses and require no new resources, do not require Commission review. However, Commission staff does review new programs in which courses are added or where the program is restructured.

One example was an Associate Degree (Transfer) program proposed by American River College. In light of the need for more mathematics majors, especially those who might pursue a teaching career, the Commission looked favorably on this proposal. The college recognized a need for additional mathematicians who could receive a bachelor's degree or

higher. To that end, it developed extensive articulation agreements with the California State University, Sacramento and the University of California, Davis to provide students with seamless transfer to their respective mathematics programs. In light of the model quality of the articulation agreements with the two aforementioned universities, Commission staff encouraged the American River College to develop additional agreements with other University of California and California State University campuses that offer baccalaureate level and higher mathematics programs. The Commission concurred with this proposal.

Not all proposals for new programs are concurred with so wholeheartedly. For example, a university proposal was recently returned, due to its generating too many questions and concerns for concurrence. Both the proposal and its conceptual framework were extraordinarily confusing, and staff feared that students would not be able to determine the appropriate pathway to take. The proposal required much more clarity and focus. Furthermore, it did not provide any data on student demand or on societal need, other than general statements that careers existed. The campus was cautioned that Commission concurrence requires much more than a preponderance of existing courses, relatively few students, and sufficient resources; all the criteria must be met.

In the case of community college review, Commission staff has concurred with roughly two thirds of all proposals submitted. Where proposals did not adequately address the Commission's criteria, staff offered a "conditional concurrence," and asked that the college provide additional information. All but one college provided the additional information necessary to receive full concurrence. The Chancellor's Office has supported the Commission's staff recommendation in all instances.

The Commission represents the public interest in discharging its program approval responsibilities for the State. When an academic program is proposed, it is done so initially by the faculty that will be teaching it and are thus committed to it with natural self-interest. A particular discipline is the faculty's area of expertise and one that they wish to share with their students. The Commission, on the other hand, looks at other indices that are equally important – those that have to do with the State's interests and the use of taxpayer funds.

The activities undertaken by the Commission with respect to academic program planning, approval, and review are important to ensure that the academic choices provided to students not only further the life of the mind, the teaching and research interests of the faculty, and institutional vitality and reputation but also meet the State's economic and workforce needs. It is this amalgam of necessary tensions to which the Commission must attend.

Issues for further consideration

As practitioners reflect, a number of issues can always be identified whose resolution would improve accomplishing the task, given further discussion and concentrated effort. This next section will discuss such prospects, ranging from the procedural through the operational to the political.

Staff has proposed that it receive full proposals from the University of California, accompanied by a cover letter highlighting the most important parts of the proposal and recommending approval from the Office of the President. This process would mirror that used by the California State University Chancellor's Office, which has proved to be satisfactory for the State University and the Commission.

Currently, the University of California sends a cover letter summarizing the full proposal and a two-to-three-page questionnaire as an attachment. These materials are often not sufficient, and receiving the full proposal might obviate the Commission's need to ask for further information, which then delays the entire process. The current format also lacks sufficient budget information about the actual costs for the number of new faculty projected to be hired, facilities to be renovated or built, equipment and library materials to be purchased, and the proposed funding sources for these costs. Quantitative information about student demand and societal need, particularly survey results, should also be as recent as possible in all proposals.

The quality of new program proposals submitted by community college campuses has improved markedly in recent months. Chancellor's Office staff has held numerous training sessions throughout the state to advise occupational and academic deans about both the Chancellor's Office and Commission's guidelines for program approval. These sessions, along with Commission staff presentations, have assisted college staff in fully understanding the Commission's criteria. To that end, less then 10 % of proposals submitted to the Commission in recent months have required additional information prior to the Commission recommending it concurrence.

To further Commission staff's efforts to be timely as possible in its responses to the systems, discussion needs to occur about how technology might be used to obtain information from the segments and for CPEC to share information, including responding to specific proposals, if appropriate.

Commission staff will reconvene the Intersegmental Program Review Council (IPRC) with its representatives from all three public segments and the Association of Independent California Colleges and Universities (AICCU). The most immediate task for the IPRC is to review the current Commission *Guidelines*. Higher education in California has changed significantly since the *Guidelines* were originally written. There are new campuses and centers, new kinds of programs, and many new initiatives. These include the recent partnership agreement between the State public university systems on expanding joint doctorates in Education; the Master of Advanced Study degree programs; the University of California's

Commission on Growth and Support of Graduate Education; work of the Joint Legislative Master Plan Committee; and a myriad of other issues such as the role of the Commission in program discontinuation and the relationship between program approval and review and WASC accreditation. The *Guidelines* require study and reconsideration.

If the Commission is to perform all the duties mandated to it by the Legislature, additional funding may be warranted. In a State as large as California with its nearly 140 public colleges and universities, many of which submit proposals for new programs, having only one staff member primarily responsible for program review set an unreasonable demand that could not be met. Since January 2001, another staff member has been added with responsibility for the community college program approval process. Even with this addition, the entire spectrum of responsibilities in academic program planning, approval, and review is difficult to achieve totally.

Finally, as colleges struggle to provide sufficient services to an everincreasing number of students, they are turning to their legislators for assistance. This occasionally results in legislative end-runs when funding is given to particular programs or organizational configurations, arrangements that then supersede the regular processes of review, whether it be for academic programs or for academic facilities. While understandable, this leads to a weakening of established processes and every success leads to more institutions stepping out of line to seek such assistance. There must be a commitment from all campuses that, however appealing, such efforts are opportunistic and irreparably damage the collegial nature of higher education and may result in misuse of the State's resources.

Conclusion

The Commission has long been involved in academic program planning, approval, and review. With this work, it improves the quality of academic programs; increases interinstitutional collaboration; ensures demand and need; reduces duplication; and conserves resources. Done formally or informally, by those both internal and external to the institution, the process helps maintain the delicate balance between innovation and tradition, faculty interests and society's needs, campus priorities and State accountability.

Appendix A

UNIVERSITY OF CALIFORNIA Proposed Degree Programs 2001 - 2006 BERKELEY

Proposed Programs	Degree	Status since February 2001
UNDERGRADUATE PROGRAMS		
Proposals added since February 2001 are shown in BOLD		
Microbial Biology	B.S.	1
Urban Studies	B.S.	1
GRADUATE PROGRAMS		
Proposals added since February 2001 are shown in BOLD		
Bioengineering	M.Engr.	1
Bioengineering Jt. with UCSF	Master & Doctor of Bioengineering	1
Communications and Networking	M. Engr.	1
Demography and Sociology	Jt. Ph.D.	3
Dietetics	M.A.S.	2
Environmental Planning	M.S.	1
Environmental Science and Management	M.E.S.M.	2
Executive MBA	M.B.A.	2
Internet-Based Design, Manufacturing, and Commerce	M. Engr.	1
M.B.A. & M.F.E Concurrent	M.B.A./M.F.E.	1
Management of Technology and Entrepreneurship	M. Engr.	1
Microbial Biology	M.S./Ph.D.	2
Microelectromechanical Systems	M. Engr.	1
Molecular Toxicology	M.S./Ph.D.	3
Optometry (revise undergraduate O.D. program)	M.S./Ph.D.	2
Product Development and Entrepreneurship	M.S.	2
Urban Educational Leadership	Ed.D.	1

UNIVERSITY OF CALIFORNIA Proposed Degree Programs 2001 - 2006 DAVIS

Proposed Programs	Degree	Status since February 2001
	3	
UNDERGRADUATE PROGRAMS		
(no new proposals have been added since February 2001)		
Avian Sciences & Animal Science	B.S.	consolidation under consideration
, <u>-</u>	B.S.	1
Biomedical Engineering (double majors) Food Engineering & Biological Systems Engineering	B.S.	consolidation under consideration
Greek	B.A.	discontinuance planned
Latin	B.A.	discontinuance planned
Natural Sciences	B.S.	1
Science and Technology Studies	B.A.	2
deletion and redifficiety officies	D.7 \.	2
GRADUATE PROGRAMS		
Proposals added since February 2001 are shown in BOLD		
•		
Biostatistics	M.S. / Ph.D.	2
Animal Science and Biology	Ph.D.	1
Community Studies and Development	Ph.D.	1
Computer Sciences	M.A.S.	1
Criminal Justice/Forensic Science	Jt. Ph.D. w/CSU Fresno	1
Education emphasis on Teacher Education in	Jt. Ph.D. w/CSU	1
Linguistically and Culturally Diverse Communities	Sacramento	
,		
Forensic Science	M.S.	3
Horticulture and Agronomy	Ph.D.	1
Infant Development	M.A.S.	1
Landscape Architecture	Jt. Ph.D w/UCB	1
Liberal Arts	M.A.S.	1
Linguistics	Ph.D.	1
Maternal and Child Nutrition	M.A.S.	1
Mathematics (Co-terminal B.S./Credential)	Credential	1
Public Health	M.P.H.	2
SCHOOLS		
Graduate School of the Environment		1
School of Education		2

UNIVERSITY OF CALIFORNIA Proposed Degree Programs 2001 - 2006 IRVINE

	VINE	04-4
Drawagad Bragrama	Degree	Status since February 2001
Proposed Programs	Degree	Smoot Chiadry 2001
UNDERGRADUATE PROGRAMS		
Proposals added since February 2001 are shown in BOLD		
Arts and Digital Media	B.F.A.	1
Asian Studies	B.A.	1
Biomedical Engineering	B.S. (see M.S./Ph.D. below)	2
Chicano/Latin Studies	B.A.	2
Computer Science and Engineering	B.S. (see M.S./Ph.D. below)	2
Global Studies in the Humanities	B.A.	2
Human Biology	B.S.	2
Humanities and Arts	B.A.	2
Information and Computer Science	B.A.	2
Information Systems Design	B.S.	2
Latin American Studies	B.A.	2
Latinos in a Global Society	B.A.	1
Literary Journalism and the Literatures of Fact	B.A.	2
Material Sciences Engineering	B.S.	2
Physical Sciences	B.A.	1
Software Engineering	B.S. (see M.S./Ph.D. below)	2
Studio Art	B.F.A.	1
GRADUATE PROGRAMS Proposals added since February 2001 are shown in BOLD		
Application of Psychological Science	M.A.	1
Arts and Digital Media	M.A. M.F.A.	1 2
• • •		
Arts and Digital Media Asian American Studies Biomedical Engineering	M.F.A.	2 1 2
Arts and Digital Media Asian American Studies	M.F.A. M.A.	2 1
Arts and Digital Media Asian American Studies Biomedical Engineering Computer Science and Engineering Criminology, Law and Society	M.F.A. M.A. M.S./Ph.D.	2 1 2
Arts and Digital Media Asian American Studies Biomedical Engineering Computer Science and Engineering	M.F.A. M.A. M.S./Ph.D. M.S./Ph.D.	2 1 2 2
Arts and Digital Media Asian American Studies Biomedical Engineering Computer Science and Engineering Criminology, Law and Society	M.F.A. M.A. M.S./Ph.D. M.S./Ph.D. M.A.S.	2 1 2 2 2
Arts and Digital Media Asian American Studies Biomedical Engineering Computer Science and Engineering Criminology, Law and Society Environmental Engineering	M.F.A. M.A. M.S./Ph.D. M.S./Ph.D. M.A.S. M.S./Ph.D.	2 1 2 2 2 2
Arts and Digital Media Asian American Studies Biomedical Engineering Computer Science and Engineering Criminology, Law and Society Environmental Engineering Latin or Greek or Classics	M.F.A. M.A. M.S./Ph.D. M.S./Ph.D. M.A.S. M.S./Ph.D. M.A.	2 1 2 2 2 2 2
Arts and Digital Media Asian American Studies Biomedical Engineering Computer Science and Engineering Criminology, Law and Society Environmental Engineering Latin or Greek or Classics Linguistics	M.F.A. M.A. M.S./Ph.D. M.S./Ph.D. M.A.S. M.S./Ph.D. M.A.S. M.S./Ph.D. M.A.	2 1 2 2 2 2 2 1
Arts and Digital Media Asian American Studies Biomedical Engineering Computer Science and Engineering Criminology, Law and Society Environmental Engineering Latin or Greek or Classics Linguistics Networked Systems	M.F.A. M.A. M.S./Ph.D. M.S./Ph.D. M.A.S. M.S./Ph.D. M.A.S. M.S./Ph.D. M.A. Ph.D. M.S./Ph.D.	2 1 2 2 2 2 1 2 2
Arts and Digital Media Asian American Studies Biomedical Engineering Computer Science and Engineering Criminology, Law and Society Environmental Engineering Latin or Greek or Classics Linguistics Networked Systems Psychology and Social Behavior	M.F.A. M.A. M.S./Ph.D. M.S./Ph.D. M.A.S. M.S./Ph.D. M.A. Ph.D. M.S./Ph.D. M.S./Ph.D. M.S./Ph.D. M.S./Ph.D. (See M.A.S. proposal below)	2 1 2 2 2 2 1 2 2 2 2
Arts and Digital Media Asian American Studies Biomedical Engineering Computer Science and Engineering Criminology, Law and Society Environmental Engineering Latin or Greek or Classics Linguistics Networked Systems Psychology and Social Behavior Psychology and Social Behavior Public Policy	M.F.A. M.A. M.S./Ph.D. M.S./Ph.D. M.A.S. M.S./Ph.D. M.A. Ph.D. M.A. Ph.D. M.S./Ph.D. M.S./Ph.D. M.S./Ph.D. M.S./Ph.D. M.S./Ph.D. M.S./Ph.D. Ph.D. (see M.A.S. proposal below) M.A.S.	2 1 2 2 2 2 1 2 2 2 2 2
Arts and Digital Media Asian American Studies Biomedical Engineering Computer Science and Engineering Criminology, Law and Society Environmental Engineering Latin or Greek or Classics Linguistics Networked Systems Psychology and Social Behavior Psychology and Social Behavior	M.F.A. M.A. M.S./Ph.D. M.S./Ph.D. M.A.S. M.S./Ph.D. M.A. Ph.D. M.A. Ph.D. M.S./Ph.D. Ph.D. (see M.A.S. proposal below) M.A.S. M.A./Ph.D.	2 1 2 2 2 2 1 2 2 2 2 1 1 2 2 2
Arts and Digital Media Asian American Studies Biomedical Engineering Computer Science and Engineering Criminology, Law and Society Environmental Engineering Latin or Greek or Classics Linguistics Networked Systems Psychology and Social Behavior Psychology and Social Behavior Public Policy Software Engineering Urban and Regional Planning	M.F.A. M.A. M.S./Ph.D. M.S./Ph.D. M.A.S. M.S./Ph.D. M.A. Ph.D. M.A. Ph.D. M.S./Ph.D. Ph.D. (see M.A.S. proposal below) M.A.S. M.A./Ph.D. M.S./Ph.D.	2 1 2 2 2 2 1 2 2 2 2 1 1 2 2 2 2
Arts and Digital Media Asian American Studies Biomedical Engineering Computer Science and Engineering Criminology, Law and Society Environmental Engineering Latin or Greek or Classics Linguistics Networked Systems Psychology and Social Behavior Psychology and Social Behavior Public Policy Software Engineering Urban and Regional Planning	M.F.A. M.A. M.S./Ph.D. M.S./Ph.D. M.A.S. M.S./Ph.D. M.A. Ph.D. M.A. Ph.D. M.S./Ph.D. Ph.D. (see M.A.S. proposal below) M.A.S. M.A./Ph.D. M.S./Ph.D.	2 1 2 2 2 2 1 2 2 2 2 1 1 2 2 2 2
Arts and Digital Media Asian American Studies Biomedical Engineering Computer Science and Engineering Criminology, Law and Society Environmental Engineering Latin or Greek or Classics Linguistics Networked Systems Psychology and Social Behavior Psychology and Social Behavior Public Policy Software Engineering Urban and Regional Planning	M.F.A. M.A. M.S./Ph.D. M.S./Ph.D. M.A.S. M.S./Ph.D. M.A. Ph.D. M.A. Ph.D. M.S./Ph.D. Ph.D. (see M.A.S. proposal below) M.A.S. M.A./Ph.D. M.S./Ph.D.	2 1 2 2 2 2 1 2 2 2 1 1 1 2 2 1
Arts and Digital Media Asian American Studies Biomedical Engineering Computer Science and Engineering Criminology, Law and Society Environmental Engineering Latin or Greek or Classics Linguistics Networked Systems Psychology and Social Behavior Psychology and Social Behavior Public Policy Software Engineering Urban and Regional Planning SCHOOLS School of Design	M.F.A. M.A. M.S./Ph.D. M.S./Ph.D. M.A.S. M.S./Ph.D. M.A. Ph.D. M.A. Ph.D. M.S./Ph.D. Ph.D. (see M.A.S. proposal below) M.A.S. M.A./Ph.D. M.S./Ph.D.	2 1 2 2 2 2 1 1 2 2 2 1 1 1 2 1

Status of proposal: 1--early planning stage; 2--undergoing campus review; 3--undergoing CCGA/CPEC review

UNIVERSITY OF CALIFORNIA Proposed Degree Programs 2001 - 2006

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Proposed Programs		Status since February 2001
UNDERGRADUATE PROGRAMS		
Proposals added since February 2001 are shown in BO	LD	
Architectural and Urban Studies	B.A.	2
Asian Humanities	B.A.	2
Asian Religions	B.A.	2
Computational Social Science	B.A.	1
Information Studies	B.A.	1
Microbiology, Immunology, and Molecular Genetics	B.S. (see M.S./Ph.D. below)	2
Music	B.M.	2
Plant Biotech	B.S.	2
Southeast Asian Studies (interdepartmental)	B.A.	2
Bioinformatics	Ph.D.	2
Bioinformatics Chicana/Chicano Studies	M.A./Ph.D.	1
Clinical Training	M.S.	3
Communication Studies	Ph.D.	1
Conservation	M.A.	2
Counseling in Student Affairs	M.Ed.	2
Dance	M.A.	proposed for discontinuance
Design Media Studies	Ph.D.	1
Digital Media	M.A.S.	1
European Studies	M.A.	1
Italian Cultural Studies	M.A.	2
Law	S.J.D.	2
Nursing	M.S.	•
Preservation of Moving Images Semiconductor Manufacturing	Jt. M.A GSEIS and Film & T√ M.Engr.	′ 2 1
Two-Year International D.D. S. Program	D.D.S.	1
TWO TOUT INCIDIATIONAL D.D. O. F. TOGICALL	0.0.0.	•

UNIVERSITY OF CALIFORNIA Proposed Degree Programs 2001 - 2006 MERCED

Proposed Programs

INITIAL GRADUATE PROGRAMS -- Planned for Fall 2004

Division of Engineering
Computer Science
Electrical Engeering
Environmental Engineering

Division of Natural Sciences
Biological Sciences
Environmenal Sciences
Mathematics
Physical Sciences
Pre-health Sciences

Division of Social Sciences, Humanities, Arts
Comparative Literature and Languages
Economics
Public Policy
Social Sciences
World History and Cultures (History and Arts)

UNIVERSITY OF CALIFORNIA Proposed Degree Programs 2001 - 2006 RIVERSIDE

Status

Proposed Programs	Degree	since February 2001
UNDERGRADUATE PROGRAMS		
Proposals added since February 2001 are shown in BOLD		
African American Studies	B.A.	1
Asian American Studies	B.A.	1
Bioengineering	B.S.	1
Bioinformatics	B.S.	1
Business Administration	B.S.	1
Chicano Studies	B.A.	1
Digital Arts (Art & Engineering)	B.S.	1
Environmental Science	B.S. with CSU Fresno	2
Film and Visual Culture	B.A.	1
Foreign Languages/Administrative Studies	B.A.	1
Information and Technology (Engineering & Management)		2
Information Systems	B.S.	1
Japanese	B.A.	1
Languages and Business	B.A.	1
Native American Studies	B.A.	1
Physics (collaborative with Los Alamos National Lab)	B.S.	1
Political Science/International Affairs	B.A.	1
Public Policy Analysis	B.A.	1
GRADUATE PROGRAMS		
Proposals added since February 2001 are shown in BOLD		
		•
Accountancy	M.S.A.	1
Art	M.F.A.	2
Bioengineering	M.S./Ph.D.	1
Bioinformatics	M.S./Ph.D.	3
Business Administration	E.M.B.A.	1
Chemical and Environmental Engineering	M.S./Ph.D.	2
Chemical Physics	Ph.D.	2 2
Creative Writing with Theater	M.F.A.	
Digital Arts Dispute Resolution and Negotiation	Ph.D.	1 1
E-business, Entrepreneurship, and Financial	M.A.S.	•
Management	M.S.	1
Education/Teacher Credential Program	M.A.	1
Education/ reacher Gredential Program Educational Leadership (collaborative w/ CSU)	Ph.D.	1
Engineering Management	M.A.S.	1
Engineering Management	M.S.	1
	. .	-

UNIVERSITY OF CALIFORNIA Proposed Degree Programs 2001 - 2006 RIVERSIDE

Status

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3

		Otatao
Proposed Programs	Degree	since February 2001
GRADUATE PROGRAMS (continued) Proposals added since February 2001 are shown in BOLD		
Environmental Chemistry	Ph.D.	2
Ethnic Studies	M.A.	1
Executive Master of Business Administration	Exec.M.B.A.	1
Family and Child Studies	M.A.S.	1
Geography	M.A./M.S./Ph.D.	discontinuance proposed
Information Systems	M.S.	1
Information Technology	M.A.S.	1
Linguistics	Ph.D.	1
Materials Science and Engineering	M.S./Ph.D.	1
Mechanical Engineering	M.S./Ph.D.	3
Native American Studies	M.A./Ph.D.	1
Neuroscience	Ph.D.	1
Performance Studies	Ph.D.	1
Physics (collaborative with Los Alamos National Lab)	M.S.	1
Public Policy	M.A./Ph.D.	1
Religious Studies (possible intercampus program)	Ph.D.	1
Rhetoric and Composition	Ph.D.	1
Religious Studies (possible intercampus program)	Ph.D.	1 1 1

M.A./Ph.D.

M.A.

J.D.

Visual and Performance Studies

Women's Studies

School of Law

SCHOOLS

UNIVERSITY OF CALIFORNIA Proposed Degree Programs 2001 - 2006

SAN DIEGO

	SAN DIEGO	Status
Proposed Programs	Degre	since February 2001
JNDERGRADUATE PROGRAMS		
Proposals added since February 2001 are show	n in BOLD	
Bioinformatics	B.S.	2
Biotechnology	B.S.	2
Environmental Systems (Environmental En	gineering) B.S.	2
International Studies	B.A.	2
Literature/Cultural Studies	B.A.	1
COLLEGES		
Sixth College		2
Seventh College		1
GRADUATE PROGRAMS		
Proposals added since February 2001 are show	vn in BOLD	
Art History, Theory, and Criticism	M.A./	Ph.D. 3
Bioengineering	M.En	g. 2
Bioinformatics	Ph.D.	. 3
Chemical Engineering	M.S./	Ph.D. 2
Communication (Science Studies)	Ph.D.	. 2
Computational Sciences	M.S./	Ph.D. 1
Creative Writing and Literature	M.A.	1
Engineering - additional programs	M.En	g. 1
Geodesy and Spatial Referencing	M.S.	1
History (dual degree w/ California Wester		. (Jt.) 2
Human Development	Ph.D	. 1
Management/Business Education	M.B.	A./Ph.D. 1
Master of Education	M.Ed	l. 3
Materials Science and Engineering	M.S./	/Ph.D. 2
Music (Computer Music)	Ph.D	. 2
Pharmacy	Phar	m. D. 1
Physics w/Specialization in Materials Phys	ics M.S.	2
Teaching and Learning	Ed.D	. 1
Theatre with Specialization in Theatre Tec	hnology and Production M.F./	A. 1
SCHOOLS		
Architecture		1
Management School	MD	A./Ph.D. 2

UNIVERSITY OF CALIFORNIA Proposed Degree Programs 2001 - 2006 SAN FRANCISCO

Proposed Programs	Degree	Status since February 2001
GRADUATE PROGRAMS		
Proposals added since February 2001 are shown in BOLD		
Biological and Medical Informatics	M.S./Pharm.D.	1
Clinical Research	M.A.S.	3
Health Psychology and Behavior Neurosciences	Ph.D. (joint w/ UCB)	1
Pharmaceutical Sciences and Pharmacogenomics	Pharm.D./Ph.D.	3
Physical Therapy Sciences	D.P.T. (joint w/ SFSU)	3
Post Baccalaureate Doctor of Pharmacy	Pharm.D.	1
SCHOOLS		
School of Advanced Health Studies		2

Status of proposal: 1--early planning stage; 2--undergoing campus review; 3--undergoing CCGA/CPEC review

UNIVERSITY OF CALIFORNIA Proposed Degree Programs 2001 - 2006 SANTA BARBARA

Proposed Programs	Degree	Status since February 2001
UNDERGRADUATE PROGRAMS		
Proposals added since February 2001 are shown in BOLD		
1 Topobalo dadod Siriod i Ostradiy 200 i dio Oriomi ili 2025		
Biotechnology and Pharmacology	B.S. (integrated with M.S. below)	1
French	B.A. (integrated with M.A. below)	1
Mathematics and Empirical Finance	B.S. (integrated with M.S./Ph.D. below)	1
Native American Studies	B.A.	1
GRADUATE PROGRAMS		
Proposals added since February 2001 are shown in BOLD		
Asian-American Studies	M.A./Ph.D.	2
Art	M.A.	1
Bioengineering	M.S./Ph.D.	1
Biomolecular Science and Engineering	M.S./Ph.D.	2
Biotechnology and Pharmacology	M.S. (integrated w/ B.S.)	1
Black Studies	M.A./Ph.D.	2
Chicano Studies	M.A./Ph.D.	2
Dance		2
Earth Surface Sciences	M.S./Ph.D.	1
East Asian Languages and Cultural Studies	Ph.D.	2
Educational Leadership	Jt. Ed.D. w/ Cal Poly SLO	1
Environmental Science & Management	Jt. M.E.S.M./M.B.A. w/UCI, UCLA	2
and Business Administration		
Evolution and Paleobiology	M.S./Ph.D.	2
Film Studies	Ph.D.	2
French	M.A. (integrated w/ B.A.)	1
Geophysics	M.S./Ph.D	1
Information Disciplines	M.S./Ph.D.	1
International Affairs	M.I.A.	2
Mathematics and Empirical Finance	M.S. & Ph.D. (integrated w/ B.S.)	1
Women's Studies	Ph.D.	2

Status of proposal: 1--early planning stage; 2--undergoing campus review; 3--undergoing CCGA/CPEC review

UNIVERSITY OF CALIFORNIA Proposed Degree Programs 2001 - 2006 SANTA CRUZ

Proposed Programs	Degree	Status since February 2001
UNDERGRADUATE PROGRAMS		
Proposals added since February 2001 are shown in BOLD		
Fast Asian Studies	B.A.	2
Astrophysics	B.S.	1
Bioinformatics	B.S.	1
Neuroscience and Behavior	B.A./B.S.	1
Plant Sciences	B.S.	1
Health Sciences	B.A./B.S.	1
COLLEGE	D 4 D 0	4
College Nine	B.A., B.S.	1
GRADUATE PROGRAMS		
Proposals added since February 2001 are shown in BOLD		
Applied Mathematics and Statistics	M.S./Ph.D.	1
Bioinformatics	M.S.	
Biomolecular Engineering	M.S./Ph.D.	
Education	Ph.D.	2
Electrical Engineering	M.S./Ph.D.	2
Education	M.A.S.	1
Music Composition	D.M.A.	1
Software Engineering	M.S./Ph.D.	2
Visual and Performance Studies	Ph.D.	2
Social Documentation	M.A.	1

Appendix B

THE ACADEMIC PLANS: Summary of Projected Programs and Requests 2002-2003 through 2011-2012

BAKE	RSFIELD		DOMI	NGUEZ HI	LLS
2002	MA	Spanish	2002	BS	Telecommunications
	MA	Teaching Mathematics		BS	Quality Assurance*
	MS	Computer Science	2003	MS	Computer Science
2003	MA	Economics*		MS	Health Care Management
	MA	Educational Administration			
	MS	Biology	<u>FRESI</u>	<u>10</u>	
	EdD	Educational Leadership			
		(with UC)	2002	MS	Electrical Engineering
2006	BS	Computer Engineering		MS	Engineering Management
	BS	Electrical Engineering		MS	Geomatics Engineering
	BS	Engineering		MS	Mechanical Engineering
CHAN	NEL ISLA	NDS		PhD	Criminal Justice Sciences (with UC Davis)
<u> </u>					
2002	BA	English*	<u>FULL</u>	<u>ERTON</u>	
	BA	Fine Arts*			
	BA	Liberal Studies	2003	BS	Computer Engineering
	BA	Mathematics		MS	Software Engineering
	BS	Biology			
	BS	Business Administration	<u>HAYV</u>	<u>VARD</u>	
	BS	Computer Science	•		***
	BS	Environmental Sciences and Resource Management	2002	EdD	Urban Educational Leadership (with UC
2003	BA	History*			Berkeley, San Francisco
2003	BA	Psychology*			State, San José State)
	MA	Education	2003	MSW	Social Work*
2004	BA	Anthropology*			
2004	BA	Chemistry*	HUMI	BOLDT	
	BA	Economics*			
	BS	Chemistry*	None		
	MBA	Business Administration			
	MPA	Public Administration	LONG	BEACH	
	MS	Bioinformatics*			
	1.20		2002	BA	Asian American Studies
<u>CHIC</u>	<u>o</u>			BA	Environmental Science and Policy
2002	BA	Criminal Justice		BA	French Studies
2002	BA	Jewish Studies		BA	Italian Studies
	211	(in collaboration with San Diego		BS	Environmental Science
	. .	State and San Francisco State)		BS	and Policy Manufacturing Engineering
	BA	Linguistics		Ca	Manufacturing Engineering Technology
	BS	Computer Graphics		MC	Science Education
	BS	Management Information		MS EdD/PhD	
		Systems		EUD/PND	(with UC Riverside and
***	MS	Mathematics Education			seven CSU campuses)
2003	BA	Music Industry and Technology*			seven CSO campuses)

^{*}Newly proposed for Trustees "planning authorization." Implementation subject to approval by the Chancellor.

LOS A	NGELES		SAN B	ERNARD	INO (continued)
2002	BA BA	Asian and Asian American Studies Chinese	2003	MA MA	English Music
	MS	Computer Science		MS	Special Education
2003	BS	Aviation Administration	2004	BS	Information Systems*
2003	DS	Aviation Administration	2004	MA	Theatre Arts
MADT	TIME AC	ADEMV		MPH	Public Health*
MAKI	TIME ACA	ADEMI		MS	Accountancy
2002	BS	Global Studies and Maritime	2005	MA	Spanish*
2002	DO	Affairs*	2005	MS	Kinesiology
		/ ARAGIL S	2006	BS	Civil Engineering
MONT	TEREY BA	v	2000	BS BS	Electrical Engineering
MON	CKLI DA			BS BS	Mechanical Engineering
2002	MS	Communication Science and		טט	Mechanical Engineering
		Technology	SANT	DIEGO	
2003	BA	Music and Performing Arts	SANT	<u> </u>	
	MS	Earth Systems Science and Policy	2002	BA	Jewish Studies
2006	MBA	Business Administration	2002	DA	(in collaboration with CSU Chico
NODE	HDIDGE				and San Francisco State)
NORT	<u>HRIDGE</u>			PhD	Social Work (with USC)*
2002	DC	Information Technology	2003	AuD	Audiology
2002	BS	Information Technology			(with UC San Diego)*
	MS	Electrical Engineering		PhD	Earth Sciences (Geophysics)
	MS	Mechanical Engineering			(with UC San Diego)*
2002	MS	Software Engineering		PhD	Evolutionary Biology
2003	BA	Public Sector Management* Science			(with UC Berkeley)
	BA MS		2006	PhD	Hearing Science
	MS MS	Computer Engineering			(with UC San Diego)*
	MS	Engineering Management	0.131.7	TD A NIGIGA	20
POMO	<u>NA</u>		SANI	FRANCISC	<u>co</u>
			2002	BA	Jewish Studies
2002	BS	Computer Engineering*			(in collaboration with CSU Chico
	BS	Integrated Earth Studies*			and San Diego State)
	MA	Psychology		BS	Apparel and Interior Design
	MS	Accountancy		BS	Atmospheric and Oceanic
	MS	Engineering Management			Sciences
	MS	Mechanical Engineering		EdD	Urban Educational
2003	MS	Food Industry Management			Leadership (with UC
	MS	Regenerative Studies			Berkeley, CSU Hayward,
O L CID	4 3 4 E 3 1 E 0				San José State)
SACK.	<u>AMENTO</u>				
2002	DPD	Education	SAN.	OSE	
2002	PhD	(with UC Davis)	2002	E ID	II bea Education 1
2004	PhD	Public Policy/Higher Education	2002	EdD	Urban Educational
2004	FIID	(with USC)*			Leadership (with UC
		(with OBC)			Berkeley, CSU Hayward, San Francisco State)
SANR	ERNARD	INO	2002	DC	Microelectronics Process
SAIN D	LINARU.	1110	2003	BS	Engineering
2002	BA	Computer Science		EdD	Educational Leadership
2003	BS	Environmental Health Science		Lub	(with UC Santa Cruz)*
	MA	Child Development*			(

^{*}Newly proposed for Trustees "planning authorization." Implementation subject to approval by the Chancellor.

SAN LUIS OBISPO

2002	BS	Software Engineering*
	MPP	Public Policy
	MS	Agricultural Business*
	EdD	Educational Leadership
		(with UC Santa Barbara)*
2004	MS	Environmental Design
	MS	Structural Engineering

SAN MARCOS

2003	BA	Kinesiology
	BS	Criminal Justice and Criminology
2006	MS	Chemistry
2007	MPA	Public Administration

SONOMA

None

STANISLAUS

2002 BA Agricultural Studies

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Appendix C

Califor	California Community Colleges Program Review	eview		
College	Program Name	Certificate	₹	AS
San Joaquin Delta	Network Software Technician (pending)	×		×
Santa Monica	Computer Animation & Visual Effects (pending)	×	×	
Palomar	Legal Studies		×	
De Anza	Biology			×
Consumnes River	Engineering			×
Lake Tahoe	Mathematics		×	
Solano	International Studies		×	
Mt. San Jacinto	Golf Course/Turf Mgmt.	×		×
Cosumnes River	Chemistry			×
Cosumnes River	Geology			×
Cosumnes River	Physics			×
Cosumnes River	English		×	
San Francisco City	Alcohol & Drug Studies	×		
Mendocino	CIS-Computer Applications-Web Page Design	×		
Cosumnes River	Mathematics			×
Cosumnes River	Biological Sciences			×
Yuba	Business Administration			×
Cosumnes River	Organizational Communication		×	
Cabrillo	Culinary Arts Baking		×	
Mt. San Jacinto	Geographic Information Systems	×		×
Cosumnes River	Geographic Information Systems	×		
American River	Art New Media	×	×	
East LA	Mathematics		×	×
Citrus	Commercial Dance	×		
Ventura	Multimedia (conjoint with Moorpark & Oxnard)	×		×
East LA	Technology, Entertainment, Animation, Multimedia	×	×	
American River	Mathematics			×
Cuyamaca	Exercise Science			×
Saddleback	Oceanography			×
Cypress	Multimedia Module for Photography	×		
Cypress	Color Photography	×		
Long Beach City	Advanced Transportation Technology-Alternate Fuels	×		×
Long Beach City	Advanced Transportation Technology-Electric Vehicles	×		×
Riverside-Moreno Valley	Biotechnology	×		×

Yuba	Diesel Equipment Techician	×		
Cypress	Multimedia Art	×		
Cypress	Vector Illustration	×		
American River	Funeral Services			×
Saddleback College	Webmaster	×	×	×
Saddleback College	Web Designer	×	×	×
Saddleback College	E-Commerce Specialist	×	×	×
Cerritos	Digital Arts	×		×
Bakersfield	Web Development	×		×
Grossmont	Speech-Language Pathology Assistant			×
Siskiyous	EMT - Paramedic	×		×
Fresno City	CIS - Computer Information Systems			×
Evergreen Valley	University Studies-CSU		×	
Mt. San Antonio	Restaurant/Hospitality Management	×	×	
Evergreen Valley	University Studies: IGETC		×	
Mendocino	Computer Applications-Networking	×		
Grossmont	University Transfer Studies		×	
Cuyamaca	Spanish	×	×	
West Hills	Phyciatric Technician	×	×	
Merced College	Laser Electro-Optical Technician	×	×	
San Diego City	Mecomtronics			×
Cuesta College	Facilities Technology	×	×	
Merced College	Biotechnology	×		×
Merritt College	Dietetic Technology	×		×
San Joaquin Delta	Speech/Language Pathology Asst.	×	×	
Sacramento City	Web Publishing Certificate	×		
Sacramento City	Software Applications Certificate	×		
Sacramento City	Programming Certificate	×		
Sacramento City	PC Support Certificate	×		
Sacramento City	Network Design Certificate	×		
Sacramento City	Network Administration Certificate	×		
Sacramento City	Data Base Certificate	×		
Sacramento City	Information Processing	×	×	
Glendale	Fitness Specialist	×	×	
Sacramento City	History		×	
Sacramento City	Anthropology		×	
West Valley	Apparel Production	×	×	
West Valley	Apparel Design	×	×	
Allan Hancock	Psychology		×	

Mendocino College	Culinary Arts Management	×		
Grossmont	Security Management	×	×	
Merced College	Diagnostic Medical Sonography	×		
American River	Geographic Information Systems	×	×	
San Joaquin Delta	Fitness Specialist	×		
College of the Canyons	Medical Assistant	×		
Fresno City College	Webmaster	×	×	
Napa Valley College	Human Services	×	×	
Santa Ana	Speech-Language Pathology Assistant	×	×	
Mt. San Antonio	Computers and Networking Technology	×		×
Merritt College	Anthropology		×	
Allan Hancock	Speech Communication		×	
Riverside	Human Services	×	×	
LA Trade Tech	Mortgage Finance	×	×	
Las Positas	Physical Education		×	
American River	CIS Networking Management			×
American River	CIS Database Management			×
American River	CIS PC Support			×
Santa Rosa	Web Site Development	×		
Grossmont	Multimedia	×		
Los Positas	Psychology		×	
American River	Network Certificate	×		
American River	Database	×		
American River	PC Support	×		
Mt. St. Antonio	Design for Interactive Visual Media	×	×	
Santa Monica	Tourism, Hospitality, & Leisure Service	×		
San Diego Mesa	Geographic Information Systems	×		×
Pasadena City	Hospitality Management	×	×	×
DeAnza	Network Design & Administration	×	×	
Southwestern	Paraprofessional Family Support Services	×		
Pasadena City	Library Technology	×	_	
College of the Canyons	Athletic Training			×
Cuesta College	Paralegal Studies		×	
Chaffey	Multimedia	×	×	
Modesto Jr.	Athletic Training			×
San Diego	Human Services	×	×	